

Listing of the Claims:

Claim 1 (Currently Amended): A bowl mill for a coal pulverizer with an air mill for primary entry of air, comprising a substantially closed separator body (2) having a central axis; and a bowl-like grinding table (3) mounted on a shaft (4) rotatable about said central axis, cooperating with a plurality of grinding rolls (6); and an air mill with an outer wall disposed under the bowl-like grinding table characterized in that said air mill is provided with multiple entry annular openings (17', 17"; or 18', 18"~~, 21, 25~~) on the outer wall of said air mill having a height and a width of first or second configuration wherein in the first configuration only a where the height (h₂) of each entry annular an opening is a fraction of a height (h) of an entry opening required for a given mill output, of the multiple entry annular openings is varied while the width (w) of each entry annular opening remains the same as a width (w) of the entry opening required for the given mill output, or as an alternative, the height (h') of each entry annular opening (18', 18") is a fraction of a height (h) of an entry opening required for a given mill output and the width (w') of each entry annular opening is a fraction of a width (w) of the entry opening required for the given mill output, such that the summation of the product (area) of the height and width of each entry annular opening of the multiple entry annular openings is equal to the product (area) of the height (h) and width (w) of the entry opening required for a given mill output and in the second configuration both the height and the width of the opening are varied simultaneously keeping total area of entry the same as area of entry of a single opening, resulting in better uniformity in air flow around the air mill section and minimizing formation of eddies and vortices.

Claim 2 (Currently Amended): The bowl mill of claim 1 wherein said multiple entry annular openings of primary air comprise double entry annular openings (17', 17"; or 18', 18";~~21, 25~~), which are set 180° from one another.

Claim 3 (Currently Amended): A bowl mill for a coal pulverizer with an air mill for primary entry of air, comprising a substantially closed separator body (2) having a central axis; ~~and~~ a bowl-like grinding table (3) mounted on a shaft (4) rotatable about said central axis, cooperating with a plurality of grinding rolls (6); and an air mill with an outer wall disposed under the bowl-like grinding table characterized in that said air mill is provided with multiple entry annular openings (17', 17"; or 18', 18";~~21, 25~~) on the outer wall of said air mill, resulting in better uniformity in air flow around the air mill section and minimizing formation of eddies and vortices, wherein the cross sectional area of each opening of the multiple entry annular openings configuration is a fraction of an area required ~~in a single entry configuration for a given mill output~~, the fractional area of each entry opening of the multiple entry annular openings being derived by dividing the area required for ~~single entry~~ the given mill output by the number of entries entry annular openings proposed.

Claim 4 (Previously Presented - Withdrawn): The bowl mill of claim 3, wherein two separate sets of inlet ductings are provided leading to said multiple entry annular openings.

Claim 5 (Canceled).

Claim 6 (Currently Amended): The bowl mill of claim 9, wherein a blockage an
air directing vane (26) is provided upstream of said second opening (25) so that primary
air from the first opening (21) does not create turbulence so that the two streams of air to
flow in the same general direction after mixing.

Claim 7 (Previously Presented): The bowl mill of claim 9, wherein the cross-section of said duct (23) is gradually decreased up to section (27).

Claim 8 (Canceled).

Claim 9 (Currently Amended): A bowl mill for a coal pulverizer with an air mill for primary entry of air, comprising a substantially closed separator body (2) having a central axis; and a bowl-like grinding table (3) mounted on a shaft (4) rotatable about said central axis, cooperating with a plurality of grinding rolls (6); and an air mill with an outer wall disposed under the bowl-like grinding table characterized in that said air mill is provided with multiple entry annular openings (17', 17"; or 18', 18"; 21, 25) on the outer wall of said air mill, resulting in better uniformity in air flow around the air mill section and minimizing formation of eddies and vortices, and further comprising comprises an inlet (19) which is bifurcated with a partition (28) for allowing half of a primary air entering inlet (19) to enter the air mill through a first opening (21) and the other half of the primary air entering inlet (19) to enter a duct (23) leading to a second opening (25) which is set 180 degrees from the first opening (21) whereby the partition splits entry of the primary air into the air mill into two streams of air.